

---

# MATHEMATICS AND SCIENCE PARTNERSHIP GRANTS

No Child Left Behind Act of 2001 Title II, Part B of the Elementary and Secondary Education Act

**Please be aware that this grant is contingent upon the availability of federal funding.  
To date, Congress has not appropriated the Title II, Part B funding for school year 09-10.**

---

## REQUEST FOR PROPOSALS

Request for Proposal (RFP)  
DOE -009-002

---

South Dakota Department of Education  
Office of Curriculum, Technology, and Assessment  
700 Governors Drive  
Pierre, SD 57501  
Equal Opportunity Employer

---

Proposal Issue Date: **January 13, 2009**  
Proposal Due Date: **February 17, 2009**

Approximate Proposal Award Notification Date: **May, 2009**  
Proposal Contact: **Penny Smith (605)-773-8196**  
E-mail: [Penny.Smith@state.sd.us](mailto:Penny.Smith@state.sd.us)

## Table of Contents

	<u>Page</u>
I. Introduction	
Federal MSP Project Description .....	4
South Dakota MSP Description.....	4
Project Objectives .....	5
Project Rationale .....	6
Project Roles and Responsibilities.....	6
Professional Development Components.....	7
Funded Project Options.....	7
Eligible Applicants .....	8
Eligible Partnerships .....	8
Eligible High-Need Local Educational Agencies.....	9
Non-public School Participation .....	10
Grant Awardees expectations....	10
Local School District expectations.....	10
Award Period.....	10
Proposal Criteria .....	11
Submission Guidelines .....	11
II. Proposal Requirements	
Abstract .....	14
Previous Title II part B Evidence.....	14
Project Plan.....	14
Educational Need .....	14
Sustainability .....	15
Local Project Evaluation and Accountability .....	15
Budget .....	18
Required Application Forms Checklist .....	20
Grant Application Cover Page .....	22
Local School District Intent to Participate Signature Form.....	24
Elementary School Participation Form.....	25
Local School District Description of Support Form.....	26
New Teacher Leader Participant Form.....	27
Institute of Higher Education Partnership Form.....	28
Action Plan Form.....	29
Evaluation Plan Form .....	30
Non-public School Participation Form .....	31
Budget .....	32
Statement of Assurances .....	34
III. Supporting Documents	
Cognitively Guided Instruction .....	38
Developing Mathematical Ideas .....	40
Lenses on Learning .....	41

# **I. INTRODUCTION MATERIALS**

## **South Dakota Mathematics and Science Grant Application**

### **Federal MSP Project Description**

The Mathematics and Science Partnerships (MSP) grant program is authorized under Title II, Part B of the Elementary and Secondary Education Act (ESEA), as amended by the No Child Left Behind (NCLB) Act of 2001.

The purpose of the program is to fund partnerships of:

- high-need school districts,
- four-year institutions of higher education (IHEs),
- and other organizations;

to improve the academic achievement of students in mathematics and science in elementary and secondary schools.

The MSP program provides grants to partnerships between K-12 schools and higher education institutions through the Department of Education (DOE) that seek to actively boost K-12 achievement in math by improving and upgrading subject area professional development, encouraging and advising teacher training and recruitment, and strengthening challenging subject-area curriculum. For further information on the Federal MSP program: <http://www.ed.gov/programs/mathsci/resources.html>

### **South Dakota MSP Description**

The primary goal of the South Dakota MSP is to create a focused statewide professional development program designed to continue building a broad-based expertise and leadership for improving student achievement in elementary mathematics instruction. The program will continue developing a statewide educational community with a cadre of skilled professionals to serve as resources and trainers in the ongoing effort to improve elementary mathematics instruction. Susan Loucks-Horsley reported in *Designing Professional Development* that most research indicates it takes three to five years to fully implement a new program or practice therefore we can't expect student achievement to change in a short period of time.

In the previous round of MSP proposals a new project called South Dakota Counts was created. The project was funded for three years and focused on grant recipients gaining increased content knowledge and pedagogy in mathematics. Round one created math specialists throughout the state and helped to deepen content knowledge for K-6 participating teachers in understanding student thinking in Numbers and Operations, Algebra, Geometry and Measurement.

The K-6 mathematics professional development project for this RFP utilizes research based strategies which have been evidenced to be effective with students of diverse backgrounds. It is the intent of this grant that new participating teachers complete all components of the training to effectively impact mathematics instruction. Continuing teacher leaders will continue to develop their skills and provide leadership to their individual school district/building. Common assessment tools will be utilized across all projects to assist the state in evaluating and providing feedback on the overall state level project as well as ensure a means to conduct research around all awarded projects.

Each funded project will have the following:

**Math Specialist/Project Manager:** Full time math specialists/project manager will:

- Collaborate with SDDOE, CAMSE, and/or other IHEs to coordinate grant activities and deliver professional development components.
- Coordinate internal evaluation activities including collection of data, any local data analysis which might be necessary, submit and complete any reports of data to SDDOE and external evaluator. Additionally, coordinate the completion of the Annual Performance Report required by the USDOE.
- Attend professional development centered on mathematics content, mathematics pedagogy, student mathematical thinking and educational leadership.
- Support the work of **20-25** elementary math teacher leaders.
  - **Math specialists coaching less than 20 teacher leaders will be considered less than full time & salary adjustments will be made.**
  - **Math specialists coaching more than 25 teacher leaders will need to justify how they will be able to meet their needs.**

**Math Teacher Leader:** math teacher leader(s) will:

- Attend professional development centered on mathematics content, mathematics pedagogy, student mathematical thinking, and educational leadership.
- Utilize professional development content in mathematics instruction to impact student achievement in mathematics instruction.
- Upon completion of one year of training, provide training for other interested K-5 teachers within the elementary building.

**Elementary Principals:** elementary principals of participating buildings will:

- If new to the program, participate in professional development designed to help administrators, as instructional support leaders in their schools, to understand and support effective mathematics instruction.
  - **Principals in new project schools will need to participate in Lenses on Learning.**
  - **New principals in continuing schools will need to participate in Lenses on Learning.**
- Support participating staff in the implementation of grant activities.
- Collaborate with project staff at the regional and state level.

## **Project Objectives**

During the next three years, the SD MSP Program will:

- Increase student academic achievement as measured by the state mathematics standards.
- Train and support new and/or continuing mathematics specialists in up to 9 different sites in South Dakota.
- Provide training for new and/or continuing mathematics teacher leaders in all participating elementary schools.
- Support work in each participating district to train additional interested K-5 teachers.
- Provide support training for new building principals to support the work of the teacher leaders in implementing research based pedagogy.
- Ensure sustainability of SD Counts program elements.

### **South Dakota Project Rationale**

The research is clear that a skilled teacher is the most important factor in improving student learning. The SD MSP project is designed to deepen and broaden teachers' knowledge base about mathematics content, mathematics pedagogy, and student mathematical thinking. Funded projects must provide teachers the opportunity to experience "best practices" in teaching mathematics. This must include constructivist instructional practices that promote mathematical reasoning, discourse, inquiry, and conceptual understanding for all students.

In order to answer the question of why the continued focus on elementary mathematics; various sources of assessment data were analyzed. After the first two years of SD Counts, data shows student achievement on the Dakota STEP is higher for students in Counts classrooms than in non Counts classrooms. The difference is most noticeable at grade 5.

From a national perspective South Dakota, has remained stagnant in terms of grade 4 NAEP scores in mathematics. Currently, the number of states scoring higher than South Dakota has increased from 8 in 2003 to 13 in 2007.

NAEP and Dakota STEP data supports the need for continued focus on elementary mathematics and professional development especially in schools serving Native American and low socioeconomic status students. The gaps are closing but the differences in percentages of proficient and advanced students are still significant using either NAEP or DSTEP data.

In addition, data has been collected in the areas of teacher content knowledge, attributes of effective instruction, attitudes about teaching mathematics, and student learning. Data shows there has been improvement in teachers' confidence in the area of instruction and the teaching of mathematics.

### **Project Roles and Responsibilities**

**South Dakota Department of Education (SDDOE)** – provides oversight and support of the statewide initiative.

**Black Hills State University Center for the Advancement of Mathematics and Science Education (CAMSE AT BHSU)** – provides SD Counts 1 training for new teacher leaders and math specialists who have not completed the initial training; provides professional development modules for new principals; and provides content and pedagogy course work to individual grantees if chosen as a continuing participant IHE .

**IHE (Institution of Higher Education)** – provides content and pedagogy course work to individual grantees for continuing teacher leaders, principals and math specialists.

**Grant Awardee-** serves as fiscal agent for the grant and carries out the grant activities, coordinates and conducts local evaluation as described within this RFP.

**Local School District** – local participating school district comprised of a Math Teacher Leader, other participating teachers and the principal.

**External Evaluator** – conducts program evaluation over the course of three years in order to measure the impact of the project on student achievement.

**Professional Development Components** All projects are required to include the following;

**Summer Content Courses** – week or longer professional development focused on content provided by IHE faculty.

**Summer Content Institutes** – 2 week or longer professional development focused on content provided by IHE faculty.

**Follow-up** – regional course work focused on pedagogy, content, as well as other school based activities. Follow-up in combination with summer work must total not less than 80 hours and is recommended to be upwards of 112 hours.

**Administrative Support Training** – Lenses on Learning support training investigates how administrators' understanding of the nature of mathematics, learning, and teaching affects their support for teacher leaders implementing practices related to mathematics instruction. It will enable administrators to be supportive as they become more familiar with the ideas that underlie standards based mathematics education. Through cooperative interaction with teacher leaders, they will develop new views of what constitutes supportive administrative practices in the K-6 mathematics classroom.

### **Funded Project Options**

Each applicant will have three options to consider:

#### **Option 1: Primary focus on new participating school districts**

New districts, schools, teacher leaders, math specialists and principals will take the SD Counts 1 training provided by CAMSE. Maintenance support will be given to continuing teacher leaders in continuing schools. Summer content coursework/ institutes for continuing teacher leaders and specialist will be determined by the grantee. Data analysis should support your need for new participants. A plan for supporting continuing teacher leaders will need to be outlined on the Local School District Description of Support form.

#### **Option 2: Balanced focus between new and continuing participating school districts**

New districts, schools, teacher leaders and principals will take the SD Counts 1 training provided by CAMSE. A plan for meeting the professional development needs of the continuing schools, teacher leaders, math specialists should be outlined on the Local School District Description of Support form and IHE that will provide the services needs to be provided on the Institute of Higher Education Partnership form. This plan must include a summer institute; regional course work and follow up school activities.

#### **Option 3: Primary focus on continuing participating school districts**

New districts, schools, teacher leaders and principals will take the SD Counts 1 training provided by CAMSE. A plan for extensive professional development, including content and pedagogy, for continuing schools, teacher leaders, and math specialists needs to be outlined on the Local School District Description of Support form and the IHE that will be providing the

services need to be provided on the Institute of Higher Education form. This plan must include a summer institute; regional course work and follow up school activities.

### **Eligible Applicants**

Competitive grant applicants must meet **one** of the following criteria to be eligible to apply for this RFP:

1. be an Educational Cooperative, Educational Service Agency, or partnership between two or more ESA's/Ed Coop of sufficient size and scope to complete the outlined activities in the project and;  
must partner with at least one high-need local educational agency within it's boundaries as determined by SDDOE or;
2. be categorized as a local educational agency with a student population of 10,000 or greater and meet the high-need school district eligibility requirements to be considered of sufficient size and scope to complete the outlined activities in the project. This LEA may be partner with other high-need local educational agencies if warranted.

### **Eligible Partnership**

Competitive grant applicants must include **one** of the following partnerships to be eligible to apply for this RFP:

1. an engineering, mathematics, or science department of an institution of higher education; and a high-need local educational agency; and
2. may include
  - another engineering, mathematics, science, or teacher training department of an institution of higher education;
  - additional local educational agencies, public or private elementary schools, or a consortium of such schools;
  - a business; or
  - a nonprofit or for-profit organization of demonstrated effectiveness in improving the quality of mathematics and science teachers.

**Eligible High-Need Local Educational Agencies**

(Based on 2005 Census Poverty Data)

Aberdeen 06-1	Elk Mountain 16-2	Lead-Deadwood 40-1	Spearfish 40-2
Andes Central 11-1	Elm Valley 06-2	Lemmon 52-2	Stickney 01-2
Artesian-Letcher 55-5	Emery 30-2	Leola 44-2	Summit 54-6
Avon 04-1	Estelline 28-2	Lyman 42-1	Timber Lake 20-3
Belle Fourche 09-1	Faith 46-2	McIntosh 15-1	Todd County 66-1
Bennett County 03-1	Faulkton 24-2	McLaughlin 15-2	Tripp-Delmont 33-5
Big Stone City 25-1	Flandreau 50-3	Meade 46-1	Vermillion 13-1
Bison 52-1	Freeman 33-1	Menno 33-2	Viborg 60-5
Bon Homme 04-2	Gregory 26-4	Mitchell 17-2	Wagner 11-4
Bonesteel- Fairfax 26-5	Haakon 27-1	Mobridge- Pollock 62-3	Wall 51-5
Brandon Valley 49-2	Hamlin 28-3	Montrose 43-2	Watertown 14-4
Brookings 05-1	Harding County 31-1	Mount Vernon 17-3	Waubay 18-3
Burke 26-2	Henry 14-2	Newell 09-2	Waverly 14-5
Canistota 43-1	Herreid 10-1	Oelrichs 23-3	Wessington Springs 36-2
Castlewood 28-1	Highmore-Harrold 34-1	Oldham-Ramona 39-5	West Central 49-7
Chamberlain 07-1	Hitchcock-Tulare 02-56-6	Pierre 32-2	White Lake 01-3
Clark 12-2	Hot Springs 23-2	Platte-Geddes 11-3	White River 47-1
Colome 59-1	Hoven 53-2	Rapid City 51-4	Willow Lake 12-3
Conde 56-1	Huron 02-2	Rosholt 54-4	Wilmot 54-7
Corsica 21-2	Iroquois 02-3	Roslyn 18-2	Winner 59-2
Custer 16-1	Isabel 20-2	Scotland 04-3	Wolsey-Wessington 02-5
Doland 56-2	Jones County 37-3	Selby 62-5	Wood 47-2
Douglas 51-1	Kadoka Area 35-1	Shannon Co. 65-1	Woonsocket 55-4
Dupree 64-2	Kimball 07-2	Sioux Falls 49-5	Yankton 63-3
Eagle Butte 20-1	Lake Central 39-2	Sisseton 54-2	
Edgemont 23-1	Langford 45-2	Smee 15-3	

### **Non-public School Participation**

All state accredited non-public schools within the physical boundaries of a participating school district must be consulted for participation in the SD MSP Program and sign as to the intentions of their participation in the project.

### **Grant Awardee will:**

- Collaborate and communicate with SDDOE program manager;
- Provide information and data to SDDOE upon request for purposes of evaluating, monitoring and documenting implementation of the grant;
- Create and sustain a partnership with CAMSE (BHSU) and/ or other IHE's during the development and implementation of grant activities;
- Submit all federal and state required MSP reports to SDDOE;
- Assure good faith commitment and support of the administration and the school board in the development and implementation of proposed activities; and
- Create a sustainability plan with participating schools.

### **Local School District will:**

- Identify one math teacher leader for each elementary building;
- Identify principals to participate in the program;
- Provide district support to all staff participating in the project;
- Create and sustain a partnership with the grant awardee;
- Provide information and data to the grant awardee upon request for purposes of evaluating, documenting implementation of the grant, and reporting; and
- Assure good faith commitment and support of the administration and the school board in the development and implementation of proposed activities.

### **Award Period**

It is anticipated that up to nine grants will be awarded. The grants will be awarded for three years. The award dates are as follows:

Year 1 - July 1, 2009-June 30, 2010

Year 2 - July 1, 2010-June 30, 2011

Year 3 - July 1, 2011-June 30, 2012

**Awards for this project are contingent upon available federal funding and continued successful implementation of the program. To date, Congress has not appropriated the Title II, Part B funding for school year 09-10.**

Additional school districts/buildings **can not** be added in year two and three of the grant. Those school districts/buildings committing in the first year of the grant should expect to participate in the professional development activities and implementation of the mathematical instructional strategies within their classrooms for the **full three years**.

It is critical that close attention be paid to the budget as the budget **will not** be increased from the original budget amounts submitted in this RFP by the applicant.

**It is anticipated that funding determinations, as well as awards will be announced approximately May, 2009.**

The South Dakota Department of Education reserves the right to negotiate individual costs with applicant if necessary.

### **Proposal Criteria**

In order to be considered for funding, applicants must:

- Completely and thoroughly answer all questions within the RFP.
- Must contain appropriate signatures to be considered.
- Demonstrate a real need and commitment for the chosen local partnerships in this grant.
- Outline an accurate budget.

### **Scoring Criteria:**

Application scoring will be based on a rubric consistent with each identified question as outlined in the RFP.

<u>Category</u>	<u>Points</u>
Abstract	5
Previous Title II part B Evidence of Success	5
Project Plan	20
Educational Need	10
Sustainability and Support	20
Local Project Evaluation & Accountability	20
Budget	10
Reviewers individual score	<u>10</u>
Total	100

### **Submission Guidelines**

To be considered for participation in this program the following requirements must be met with this RFP Application.

1. One **original** paper proposal (word processed or typed) with appropriate original signatures.
2. Two complete **paper copies** of original proposal.
3. One **electronic copy**, of the original proposal (word 2003 or PDF format) with or without signatures. This may be submitted via email by submission deadline or enclosed via disc or USB storage device.

Faxed or emailed only proposals will not be accepted.

Proposals must be postmarked by **February 17, 2009** or hand-delivered to the Department of Education, Office of Technology, Curriculum and Assessment by **5:00 PM (CST)** on the stated deadline.

Mail or hand-deliver the completed proposals to:

**South Dakota Department of Education  
Office of Curriculum, Technology, and Assessment  
Attn: Penny Smith  
Title II, Part B  
700 Governors Drive  
Pierre, SD 57501**

**SDDOE is not responsible for transmittal time or irregularities in delivery on the part of the US Postal Service or other courier services.**

SDDOE reserves the right to reject any and all submissions received as a result of this application process.

## **II. PROPOSAL REQUIREMENTS**

## **PROPOSAL REQUIREMENTS**

### **Abstract** (5 points)

Provide an abstract that states the expected outcomes in mathematics instruction and any indirect needs in mathematics that would be addressed as a result of this project.

### **Previous Title II part B Evidence of Success** (5 points)

If you have received a South Dakota Counts grant in round 1, please provide evidence to support success. If not, please address your readiness and evidence of other project successes to implement this project.

### **Project Plan** (20 points)

Identify which of the three options this proposal will focus its efforts in implementing the project. Provide the expected plan of support for new teacher leaders and principals (each of which is required to attend SD Counts 1 training with CAMSE).

Explain the design and delivery method, inclusive of a timeline summary of activities for continuing teacher leaders. Describe all aspects of the project including the area of focus and explain how professional development will be carried out with the chosen IHE.

Complete the action plan form on page 27 of this rfp.

### **Educational Need** (10 points)

Compile, analyze, and summarize data to support the need for mathematics professional development for participating local school district in the chosen option.

Required data sources:

1. Student achievement data in mathematics – i.e. standardized test scores, district-created assessments, alternative assessments for special education students or English Language Learners (ELL), DakotaSTEP, etc.
2. Demographic data – i.e. student enrollment, socio-economic status, race/ethnicity, etc.

Optional data sources:

1. Program data – i.e. teacher credentials, graduation rates, program evaluation methods, etc.
  - Comparison data between Counts participants and non Counts participants
  - Aggregate Counts project data if applicable.
2. Perceptions data – i.e. survey information regarding school climate, professional development participation, tardiness, etc.

### **Sustainability and Support** (20 points)

Primary applicant must:

- Explain how the partnership will support new and continuing teacher leaders and new administrators through out the project.
- Include plans to continue the activities of the project after the multi-year grant period has ended.

Each local school district must:

- Explain how they will support their teacher leader during the project
- Create a culture of acceptance for the nature of the Counts project.
- Explain how they will sustain the project beyond the funding period.

In addition each local school district must provide documentation which demonstrates teacher leader understanding of and commitment to the project requirements.

Local school districts identified for school improvement in the area of mathematics will be given priority.

### **Local Project Evaluation and Accountability** (20 points)

SD Counts 1 project was delivered with a more centralized focus for all sites. This allowed centralized project management, evaluation collections, and common reporting technical assistance. The new round of SD counts 2 will still have a centralized focus; however, each awarded project will be treated as a separate entity rather than a component of one larger focused project. Because of this change more responsibility will fall on the individual grantee in terms of evaluation and data collection.

The three critical elements for project evaluation are teacher content knowledge, student achievement in mathematics, and an evaluation plan that provides valid results.

Common assessment tools will be utilized as much as possible. It is expected that the External Evaluator will develop common data elements, conduct interviews, aggregated local project evaluation data to inform the state program, and analyze elements to draw conclusions.

In addition to an external evaluator each project will need to conduct internal evaluation. The following lists role expectations for each level of the partnership.

Local Project Evaluation will:

- Coordinate and manage the internal evaluation and data collection tools;
- Develop any local evaluation tools necessary to the internal evaluation;
- Assist in the design and deliver of data collection tools;
- Collect and submit any necessary external data elements;
- Provide a list of students for each teacher leader in the project to the state and/or external evaluator; and
- Complete the Annual Performance Report.

IHE Partnership evaluation of the locally funded project will:

- Conduct continuing teacher content knowledge evaluation;
- Conduct continuing teacher pedagogy knowledge evaluation.

State Partnership evaluation of all funded projects will:

- Aggregate & coordinate state level data collection in the following areas:
  - NAEP test scores evaluation
  - DStep test scores evaluation
  - Teacher Beliefs and Attitudes of participant's evaluation;
- Manage the use of any control group for validity study evaluation;
- Provide technical assistance for local and state evaluation elements for each funded project;
- Assist in the design and development of data collection tools; and
- Facilitate the coordination of the external evaluation.

Camse Partnership (SD Counts 1 and Lenses on Learning purposes) will:

- Conduct new teacher content knowledge evaluation consistent with SD Counts 1 evaluation as collaboratively agreed upon by the state and external evaluator;
- Conduct new teacher pedagogy knowledge evaluation consistent with SD Counts 1 evaluation as collaboratively agreed upon by the state and external evaluator;
- Implement the beliefs and attitudes survey for new participants consistent with SD Counts 1 evaluation as collaboratively agreed upon by the state and external evaluator; and
- Conduct Lenses on Learning evaluation consistent with SD counts 1 evaluation as collaboratively agreed upon by the state and external evaluator.

**\*\* An External Evaluator will be secured through SDDOE to conduct additional evaluations.**

Additionally, The U.S. Department of Education requires the following elements in the project plan for evaluation and reporting for the local MSP project. The MSP Annual Performance Report outlines specific data elements that must be collected and reported by each project. In South Dakota Counts some of these elements were centrally located and technical assistance provided to accomplish collection and aggregation of the data. However, in this round of projects each entity will be responsible for collection their local evaluation of teacher content knowledge, student achievement in mathematics and any additional elements of interest to the project partners. The project must include an evaluation plan that provides valid results. Common evaluation tools may still be used as deemed appropriate to the project.

Described below are the components of the Annual Performance Report

- Description of MSP Partners
- Roles and Responsibilities of Partners
- Characteristics of MSP Participants
- Professional Development Models
- Program Evaluation Design – the best designs for evaluation are experimental or quasi-experimental designs that can yield scientifically valid results.
- Evaluation Findings and Evidence of Outcomes

- Data on teacher and student learning - gains in teacher content knowledge and student achievement

Complete the Evaluation Plan Form found on page 28 of this RFP.

For more information on project evaluation and federal requirements, consult *U. S. Department of Education Mathematics and Science Partnership Program Annual Performance Report Online System User's Guide* available on the DOE Title II B page: <http://doe.sd.gov/octa/title/IIpartb/index.asp>

**Budget** (10 points)

Applicants need to include budgets for all three years of the grant. Partner districts **can not** be added in consecutive years of the grant and once committed in the first year should expect to be partnered for the full three years of the grant.

Proposals should include complete dollar amounts for all local partnerships/participants as budgets **will not** increase from the original projections submitted in this RFP by the LEA. Requested costs need to be consistent with local policies.

Budgets will include the following items:

<b>Budget Item</b>	<b>Description</b>
Elementary Math Specialist (Director) Salary	Full time 20-25 teacher leaders $\frac{3}{4}$ time (.75) = 15-19 $\frac{1}{2}$ time (.50) = 10-14 Coordination costs for grant
Total of all benefits	Benefits for math specialist
CAMSE Partner Contract Each projected project will need to directly negotiate with CAMSE these costs prior to proposal submission.	This line item includes SD Counts 1 associated costs- contract should include costs for new participants, any necessary math manipulative for new grantees and all associated costs for content delivery, evaluation tools, delivery and aggregation for SD counts 1 training inclusive of each year's activities.
Summer Content Course Costs	# of new teacher leaders/specialist x \$cost/night for 5 nights # of new teacher leaders/specialist x \$26/day for 5 days (adjustments will be made if approved rates change following awards) \$125 per new teacher leader for math materials \$2500 per new grantee math specialist for math manipulatives
CAMSE Lenses on Learning Each projected project will need to directly negotiate with CAMSE these costs prior to proposal submission.	Lenses on Learning associated costs -This includes contract costs for Lens on Learning support training for new principals inclusive of each year's activities.  # of new principals x \$cost/night for 3 nights lodging # of principals x \$26/day for 3 days meals (adjustments will be made if approved rates change follow awards) \$100 per new principal for Lenses on Learning costs
Graduate Credits-New Participants  *awarded at actual BOR grad credit rate	8 credits/new math specialist x \$50.38 (budget purposes only) 4 credits/new teacher leader x \$50.38 2 credits/new principal x \$50.38 Amount listed is in anticipation of an 8% increase per year actual costs will be awarded at the approved BOR yearly rate.

<p><b>IHE Partner Contract</b> Each projected project will need to directly negotiate with the IHE these costs prior to proposal submission.</p> <p><b>Continuing Summer Content Courses/Institutes provided by CAMSE or other IHE</b> (necessary lodging not to exceed state rate)</p>	<p><b>This includes</b> contract cost for continuing teacher leaders and principals. It includes all associated costs for content development, evaluation tools and content delivery costs for the institutes, follow-up and administrative professional development.</p> <p># of continuing teacher leaders/specialist x \$cost/night for x nights lodging # of continuing teacher leaders/specialist x \$26/day for x days meals \$75 per continuing teacher leader for math materials</p>
<p><b>Graduate Credits-Continuing Participants</b> (It is the option of each applicant to decide if the project will continue to pay for continuing participant's graduate credits) Number of credits will need to be determined between applicant and IHE</p>	<p>x credits/continuing math specialist x yearly rate (budget purposes only) x credits/continuing teacher leader x yearly rate x credit/continuing principal x yearly rate</p> <p>Not to exceed the BOR approved rate per year. For estimated budget purposes only an 8% increase is estimated but will only be awarded at actual rates per year (yr 1) 43.20/credit, (yr 2) 46.65/credit, (yr 3) 50.38/credit.</p>
<p><b>Office Operations/activities support materials/supplies, communications, copying/printing, postage and registrations</b></p>	<p># teacher leaders x 50.00</p>
<p><b>Travel Expenses &amp; Mileage</b> state events, regional project activities, and local school district site visits</p>	<p># of miles round trip * # teacher leaders * 10 visits * .20/mile</p> <p>i.e. 100 miles * 2 teacher leaders * 10 visits = 2,000 * .20/mile</p>
<p><b>Project Materials</b></p>	<p>Textbooks for Lenses on Learning –provided by CAMSE</p>
<p><b>Indirect Costs</b></p>	<p>Fiscal agents are expected to utilize their approved SDDOE restricted indirect cost rate agreement.</p>

This RFP does not provide monies for equipment, software, or infrastructure.

It does provide monies for professional development, participant incentives, management of the comprehensive professional development plan, contracted services and materials needed to deliver the comprehensive professional development plan.

SDDOE reserves the right to make adjustments as needed to the final budget once grant awards have been determined. Participants and buildings may be restricted depending upon funding availability.

**Required Application Forms**

- ☐ Grant Application Cover Page
- ☐ Local School District Intent to Participate Signature Form
- ☐ Elementary School Participation Form
- ☐ Local School District Description of Support
- ☐ New Teacher Leader Partner signature Form
- ☐ Institute of Higher Education Partnership Form
- ☐ Action Plan
- ☐ Non-public School Participation Form
- ☐ Budget
- ☐ Statement of Assurances

**Do not include the above pages in your application submission.**

# **REQUIRED APPLICATION FORMS**

## Mathematics and Science Partnership Grant Application Cover Sheet

Name of Lead Agency or LEA:		
Mailing Address:		
Fiscal Agent for Project:	Tax Identification Number of Fiscal Agent:	
<b>Lead Agency Representative:</b>		
Title:		
Phone:	Fax:	
Email address:		
<b>Project Director:</b>		
Title:		
Phone:	Fax:	
Email address:		
<b>Math Specialist (if different from project director):</b>		
Title:		
Phone:	Fax:	
Email address:		

Authorized Representative Signature: I hereby certify that all data in this application are true and correct. The document has been duly authorized by the governing body of the applicant. The applicant will comply with the attached assurances if assistance is rewarded.

Authorized Representative's Printed Name	Authorized Representative's Signature	Date
--	---------------------------------------	------

Funding Request Calculation		List name of participating school districts with number of elementary buildings in project. Indicate (N) New or (C) for Continuing.
Grant Funds Requested		
In-Kind Matching Contributions (opt)		
Grand Total		
Number of public school participating teachers New Continuing		
Number of non-public school teachers participating New Continuing		
Number of Public School Principals Participating New Continuing		
Number of Non-Public School Principals Participating New Continuing		
Number of Districts Participating New Continuing		
Number of Elementary Buildings Participating New Continuing		
Types of Partners:  Please check all that apply to this application <b>Required</b> <input type="checkbox"/> High-need South Dakota School District <input type="checkbox"/> Educational Service Agency, Cooperative, or School District with a student population of 10,000 or greater  <b>Optional</b> <input type="checkbox"/> Additional high-need South Dakota School Districts <input type="checkbox"/> Additional South Dakota School Districts that are not high-need <input type="checkbox"/> Other Educational Service Agency or Cooperative		

## Mathematics and Science Partnership Local School District Intent to Participate Signature Form

The \_\_\_\_\_ School District agrees to participate in the SD MSP program as submitted by (insert primary grant applicant) and by agreeing to participate, it is understood that the school district will meet the following conditions over the life of the grant (**3 yrs**).

The participating school district will:

1. Identify at least one math teacher leader for each participating elementary building.
2. Identify principals to participate in the program.
3. Describe how the district will provide support to all staff participating in the project.  
(complete form)
4. Create and sustain a partnership with the grant awardee.
5. Provide information and data to the grant awardee, external evaluator or state entity upon request for purposes of evaluating, documenting implementation of the grant, and reporting.
6. Assure good faith commitment and support of the administration and the school board in the development and implementation of proposed activities.

To the best of my knowledge and belief, all information submitted on behalf of \_\_\_\_\_ School District in this application is true and correct. We are local school district applicants in the proposed project and understand the role for our entity in this project. In agreeing to be a participant in this grant, the proper district procedures and policies have been followed. We will comply with the statement of assurances and project guidelines if the grant is awarded.

Typed Name of Authorized Representative	Title	Date Signed
Signature of Authorized Representative	Representing	Telephone Number
E-mail Address		

**Mathematics and Science Partnership Elementary School Participation Form**  
(Complete one for each elementary school in the project)

- Districts must provide a list of proposed staff interested in participating during the next three years.
- Identify a minimum of one Math Teacher Leader.
- Identify participating principal.
- Identify K-6, Special Education, and Title I participants and the year they intend to start.
- Indicate the number of credits each participant has in math beyond those required for a bachelor's degree.
- If application is funded, staff will attend appropriate professional development.

\*\* Note: SDDOE reserves the right to limit participants and buildings.

<b>District Name and Building Name:</b>
<b>Total number of staff providing math instruction in elementary building:</b>

**New Participants**

Staff Name	Staff Assignment	Year 1	Year 2	Year 3	# of math credits	Staff Signature By signing this paper you agree to the terms in the participant form
1. <b>Participating Principal (s)</b>						
2.						
1. <b>Math Teacher Leader(s)</b>						
2.						
3.						

**Continuing Participants**

Staff Name	Staff Assignment	Year 4	Year 5	Year 6	# of math credits	Staff Signature
1. <b>Participating Principal (s)</b>						
2.						
1. <b>Math Teacher Leader(s)</b>						
2.						
3.						

## Mathematics and Science Partnership Local School District Description of Support Form

The \_\_\_\_\_ School District will support **new** teacher leaders in the following manner: (Describe how the district will provide support to new staff participating in the project.)

The \_\_\_\_\_ School District will support **continuing** teacher leaders in the following manner: (Describe how the district will provide support to new staff participating in the project.)

Typed Name of Authorized Representative	Title	Date Signed
Signature of Authorized Representative	Representing	Telephone Number
E-mail Address		

## Mathematics and Science Partnership New Teacher Leader Participate Signature Form

(Complete one for each new teacher leader)

I \_\_\_\_\_ understand and agree to participate in the SD MSP program as submitted by (insert primary grant applicant) and by agreeing to participate, it is understood I will meet the following conditions during the next **3 years** of the grant.

The new participating teacher leader will:

1. Attend the Summer Institutes (5 days each summer);
2. Attend SD Counts training provided by Math Specialists;
3. Provide training for teachers in their local district; and
4. Create a demonstration classroom.

Typed Name of New Teacher Leader	Signature	Date Signed
Email address		

Add rows as needed for additional leaders

---

## Mathematics and Science Partnership New Principal Signature Form

I \_\_\_\_\_ understand and agree to participate in the SD MSP program as submitted by (insert primary grant applicant) and by agreeing to participate, it is understood I will meet the following conditions during the next **3 years** of the grant.

1. Attend Lenses on Learning administrator training;
2. Support the teacher leaders in my building; and
3. Support the sustainability of the grant.

Typed Name of New Principal	Signature	Date signed
Email address:		

(copy this form as needed)

## Mathematics and Science Partnership Institute of Higher Education Partnership form

The (insert IHE name) agrees to provide the following support in this partnership:

Identify what support the IHE will provide during the course of the grant (3 years); such as: faculty to plan, present and evaluate professional development, how teachers will be supported during the school year, etc. Include a vita for faculty that is expected to be involved in the project.

Typed Name of Authorized Representative	Title	Date Signed
Signature of Authorized Representative	Representing	Telephone Number
E-mail Address		

**Mathematics and Science Partnership Action Plan Form**  
(duplicate as needed)

Activity	Person (s) Responsible for implementation of activity	Timeline (Date)	Cost	Mathematics Concept	Materials needed to support activity	Baseline data

**Mathematics and Science Partnership Evaluation Plan**  
(duplicate as needed)

Activity	Indicator of success	Baseline data	Benchmark	Method of evaluation	Evaluation Instrument	Evaluation Timeline	Person Responsible

## Mathematics and Science Partnership Non-public School Participation Form

Must be completed by all participating public schools with state accredited private schools in their district.

Public School District Participant

Non-public School within the District

ESA Region

District Number

Federal Program	Non-public School Consulted		Non-public School Participating		Comments
	Yes	No	Yes	No	
Title II, Part B—South Dakota Mathematics and Science Partnerships Program					if Yes, List names of Participating Teachers

This is to certify that a consultation occurred between a representative of _____ ( <i>Public School District Name</i> ) and _____ ( <i>State Accredited Non-public School District Name</i> ).			Date of Consultation
Typed Name of <i>Public</i> School Representative	Title	Telephone Number	
Signature of <i>Public</i> School Representative	Email	Date Signed	
Typed Name of State Accredited <i>Non-public</i> School Representative	Title	Telephone Number	
Signature of State Accredited <i>Non-public</i> School Representative	Email	Date Signed	

# MATHEMATICS AND SCIENCE PARTNERSHIP PROJECT BUDGET

Requested costs need to be consistent with local policies.

BUDGET ITEM/ Description & costs/unit for each item being requested	GRANT FUNDS REQUESTED (GFR) Year 1: July 1, 2009 – June 30, 2010	GRANT FUNDS REQUESTED (GFR) Year 2: July 1, 2010 – June 30, 2011	GRANT FUNDS REQUESTED (GFR) Year 3: July 1, 2011 – June 30, 2012
<b>100. SALARIES</b>			
<b>Math Specialist (Director) Salary</b> Provide number of days inclusive of coaching/modeling days, grant general activities, summer activities, and any other necessary time requirements. (i.e. Institutes, workshops & other activities)  <div style="text-align: right;">TOTAL</div>			
<b>200. EMPLOYEE BENEFITS</b>			
<b>Total of all benefits</b> Include list of benefits  <div style="text-align: right;">TOTAL</div>			
<b>300. PURCHASED SERVICES</b>			
<b>CAMSE Partner Contract</b> This includes contract cost for new participants and Lens on Learning training for new principals. Provide details of any necessary math manipulative for new grantees and all associated costs for content delivery, evaluation tools and delivery for SD counts training inclusive of year activities. <b>New Teacher Leader Summer Workshop</b> Include and itemize costs for lodging and meals for all new participants including math specialist. <b>New Principal Lenses on Learning</b> Include all associated costs as well as lodging and meals for all participating principals.  <b>New Participants Graduate Credit</b> Not to exceed the BOR approved rate per year. For estimated budget purposes only an 8% increase is estimated but will only be awarded at actual rates. (yr 1) 43.20, (yr 2) 46.65, (yr 3) 50.38.  <b>IHE Partner Contract</b> (identify name of institution-if choosing CAMSE please detail this cost here rather than above) This includes contract cost for continuing teacher leaders and principals and includes content development, evaluation tools and content delivery costs for the institutes, follow-up and administrative professional development.  <b>Continuing leaders Summer Institutes/Workshops</b> Include costs for lodging and meals for continuing participants including math specialist.  <b>Continuing Participants Graduate Credit</b> If grant is paying for it. This is not to exceed the BOR approved rate per year. For estimated budget purposes only an 8% increase is estimated but will only be awarded at actual rates. (yr 1) 43.20, (yr 2) 46.65, (yr 3) 50.38.  <b>Office Operations/Activities</b> Teacher Leaders x 50.00			

TOTAL			
<b>330. Travel</b>			
<b>Travel Expense and Mileage</b> Include new teacher leader visits, continuing teacher leader visits, institute travel, etc.			
TOTAL			
<b>400. SUPPLIES AND MATERIALS</b>			
<b>Project materials</b>			
# Continuing teacher leaders x 75.00 if not negotiating directly into IHE contract above			
Total			
<b>Subtotal</b>			
*Indirect Costs			
<b>Grand Total</b>			

Budget will be adjusted yearly to reflect actual number of participants and actual indirect costs on projected totals. SDDOE reserves the right to limit numbers of participants if necessary.

**\*Indirect Cost Information (To be completed by Your Business Office):**

If you are requesting to budget for restricted indirect costs, please answer the following questions:

- (1) Are you a South Dakota Public School District? \_\_\_\_\_ (yes, no) If yes, use your state approves restricted indirect cost rate. If no, go to number two.
- (2) Do you have a Restricted Indirect Cost Rate Agreement approved by an agency of the state of federal government? \_\_\_\_ (yes, no) if no, you may not claim indirect costs, If yes, go to number three.
- (3) Period Covered by the Restricted Indirect Cost Rate Agreement: From: \_\_\_\_\_ To: \_\_\_\_\_ (mm/dd/yyyy)  
Approving agency (please specify): \_\_\_\_\_

---

**Please attach a copy of you approved restricted indirect cost rate agreement**

## STATEMENT OF ASSURANCES

### **GENERAL ASSURANCES:**

The local education agency (LEA) hereby assures the South Dakota Department of Education that:

1. Each program will be administered in accordance with all applicable statutes, regulations, program plans, and applications.
2. The control of funds provided under each program and title to property acquired with program funds will be in a public agency or in a nonprofit private agency, institution, organization, or Indian tribe, if the law authorizing the program provides for assistance to those entities.
3. The public agency, nonprofit private agency, institution, or organization, or Indian tribe will administer the funds and property to the extent required by the authorizing statutes.
4. The applicant will adopt and use proper methods of administering each such program, including —
  - the enforcement of any obligations imposed by law on agencies, institutions, organizations, and other recipients responsible for carrying out each program; and
  - the correction of deficiencies in program operations that are identified through audits, monitoring, or evaluation.
5. The applicant will cooperate in carrying out any evaluation of each such program conducted by or for the State educational agency, the Secretary, or other Federal officials.
6. The applicant will use such fiscal control and fund accounting procedures as will ensure proper disbursement of, and accounting for, Federal funds paid to the applicant under each such program.
7. The applicant will —
  - submit such reports to the State educational agency (which shall make the reports available to the Governor) and the Secretary as the State educational agency and Secretary may require to enable the State educational agency and the Secretary to perform their duties under each such program; and
  - maintain such records, provide such information, and afford such access to the records as the State educational agency (after consultation with the Governor) or the Secretary may reasonably require to carry out the State educational agency's or the Secretary's duties.
8. Before the application was submitted, the applicant afforded a reasonable opportunity for public comment on the application and considered such comment.
9. Funds will be used to increase the level of State, local, and other non-Federal funds that would, in the absence of federal funds, be made available, and in no case supplant such State, local, and other non-Federal funds.
10. Equitable participation of non-public schools (if any) will be provided. The applicant will consult with officials of non-public schools in a meaningful and timely manner, provide non-public participants genuine access to equitable services and equal expenditure of funds.

### **PRO-CHILDREN ACT OF 1994 ASSURANCE**

I hereby acknowledge that the LEA of which I am the authorized representative, has adopted the provisions of the Pro-Children Act of 1994. (The Pro-Children Act requires that smoking not be permitted in any indoor facility used routinely or regularly for the provision of "children's services" to persons under age 18, if the services are funded by specified Federal programs either directly or through State or local governments.)

### **GUN FREE SCHOOLS ACT ASSURANCE**

I hereby acknowledge that the LEA, of which I am the authorized representative, has adopted a Gun Free Policy that is in compliance with SDCL 13-32-4.

### **CONSTITUTIONALLY PROTECTED PRAYER IN PUBLIC SCHOOLS CERTIFICATION**

I hereby certify that the LEA, of which I am the authorized representative, has no policy that prevents, or otherwise denies participation in, constitutionally protected prayer in its public elementary and secondary schools.

As a condition of receiving federal funds under terms of the Elementary and Secondary Education Act ("ESEA") of 1965, as amended by Section 9524 of the No Child Left Behind Act of 2001, this certification is required by October 1st of each year. The South Dakota Department of Education in its role as the official public education state agency in South Dakota will annually send to the U.S. Secretary of Education a list of those LEAs in South Dakota that have not submitted the required certification or against which complaints have been made that the LEA is not in compliance with this provision.

### **CHILDREN'S INTERNET PROTECTION ACT (CIPA)**

The local education agency certifies that it will comply with the Child Internet Protection Act.

### **LOBBYING**

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 34 CFR Part 82, for persons entering into a grant or cooperative agreement over \$100,000, as defined at 34 CFR Part 82, Sections 82.105 and 82.110, the applicant certifies that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;

(b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;

(c) The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including sub grants, contracts under grants and cooperative agreements, and subcontracts) and that all sub recipients shall certify and disclose accordingly.

### **DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS**

As required by Executive Order 12549, Debarment and Suspension, and implemented at 34 CFR Part 85, for prospective participants in primary covered transactions, as defined at 34 CFR Part 85, Sections 85.105 and 85.110--

A. The applicant certifies that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transaction (Federal, State, or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

### **DRUG-FREE WORKPLACE**

As required by the Drug-Free Workplace Act of 1988, and implemented at 34 CFR Part 85, Subpart F, for grantees, as defined at 34 CFR Part 85, Sections 85.605 and 85.610 -

A. The applicant certifies that it will or will continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an on-going drug-free awareness program to inform employees about:
  - (1) The dangers of drug abuse in the workplace;
  - (2) The grantee's policy of maintaining a drug-free workplace;
  - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
  - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:
  - (1) Abide by the terms of the statement; and
  - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to: Director, Grants Policy and Oversight Staff, U.S. Department of Education, 400 Maryland Avenue, S.W. (Room 3652, GSA Regional Office Building No. 3), Washington, DC 20202-4248. Notice shall include the identification number(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:
  - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
  - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

### **ASSURANCES - NON-CONSTRUCTION PROGRAMS**

**Note:** Certain of these assurances may not be applicable to your project or program.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management, and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as

amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with the provisions of the Hatch Act (5 U.S.C. 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. 276a to 276a-7), the Copeland Act (40 U.S.C. 276c and 18 U.S.C. 874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), regarding labor standards for federally assisted construction sub agreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1721 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4801 et seq.) which prohibits the use of lead- based paint in construction or rehabilitation of residence structures.

#### **Local Education Agency (LEA)**

**ASSURANCES AND CERTIFICATION STATEMENT:** The above named applicant assures the South Dakota Department of Education that these projects will be administered in compliance with the assurances contained in this application, with state and federal laws and regulations applicable to the use of these funds, that the information contained in this application is accurate and complete.

\_\_\_\_\_  
Name of LEA Authorized Representative  
(Type or Print)

X

\_\_\_\_\_  
**Original** Signature of LEA Authorized  
Representative

\_\_\_\_\_  
Date

### **III. SUPPORTING DOCUMENTS**

## COGNITIVELY GUIDED INSTRUCTION (CGI) PROGRAM OVERVIEW

Cognitively Guided Instruction (CGI) is a professional development program for K-6 teachers that show explicitly what kind of knowledge students bring to the mathematics learning process and how they connect that knowledge with formal concepts and operations. CGI is guided by two major theses. The first thesis is that children bring an intuitive knowledge of mathematics to school with them and that this knowledge should serve as the basis for developing the formal mathematics instruction in primary school. The second thesis is that mathematics instruction should be based on the relationship between skills and problem solving.

CGI provides a basis for identifying what is difficult and what is easy for students to comprehend in their study of mathematics. The emphasis is on what children can do, rather than what they cannot do, which leads to a very different approach regarding wrong answers. With the CGI approach, teachers work backward from the error to identify the valid concepts that students do understand. The program aims to improve children's mathematical skills by changing teachers' beliefs regarding how children learn and ultimately their teaching practices.

Cognitively Guided Instruction is a way for teachers to understand children's intuitive mathematical thinking and use that knowledge to help children learn mathematics with understanding. This research-based model of children's thinking is designed to help teachers construct conceptual maps of the development of children's mathematical thinking in specific content domains. CGI will help teachers in facilitating any mathematics curriculum or materials they are currently using.

### Cognitively Guided Instruction Classroom (CGI)

<b>Predominant Addition/Subtraction Method and Related Conceptual Structure</b>	<b>Instructional Strategies</b>	<b>Classroom Supports</b>
<p>Methods that begin with one number and move up and down the sequence by tens and ones [Sequence tens-ones]</p> <p>Decompose-tens-and-ones methods - tens and ones are added or subtracted separately from each other [Separate tens-ones]</p>	<ul style="list-style-type: none"> <li>- Word problems provide basis for almost all instruction</li> <li>- methods develop as natural extensions of methods to solve problems using single units</li> <li>- teacher as facilitator</li> <li>- encourages child to collections of tens and ones</li> <li>- place value concepts emerge through use of base ten materials</li> <li>- no prevalent strategy in use at one time</li> <li>- children learn from interacting with each other</li> <li>- children shift among representations as they solve problems or discuss solutions</li> </ul>	<p>Discussion</p> <ul style="list-style-type: none"> <li>- strategies discussed serve as model for others</li> <li>- provides opportunity for children to reflect</li> </ul> <p>- children use counters to solve problems by modeling the problems</p> <ul style="list-style-type: none"> <li>- counters</li> <li>- tens blocks which are eventually seen as convenient collections of unit counters</li> </ul> <p>- in time depend less on counters</p>

## **CGI Training Components**

Cognitively Guided Instruction (CGI) is a professional development program for teachers of kindergarten through the sixth grade. CGI helps teachers understand their students' mathematical thinking which correlates to vast improvements in students' mathematical understanding and problem solving skills. It has been proven effective for boys and girls of diverse social class, racial, ethnic, and language proficiency backgrounds. At this time, all four of the following CGI workshops are held as week-long institutes for a total of 30 hours of training time in SD Counts 1.

### **Basic CGI Training**

This workshop is designed for teachers of kindergarten through third grade children and those who work with such teachers. No prior experience with CGI is necessary.

### **Advanced CGI Institute**

This Institute is designed for people who want to take a deeper look at CGI to improve how they use CGI with children and/or to support other teachers in learning about CGI. Emphasis will be placed on children's understanding of base ten strategies that children use to solve problems with large numbers and how what we know about such understanding influences our mathematics instruction. Information on how to support teachers' learning will be integrated into our deeper look at children's thinking.

Information on how to support teachers' learning will be integrated into our deeper look at children's thinking.

### **CGI Algebra**

This Institute helps elementary school teachers integrate the major principles of algebra into their arithmetic instruction. This program is based on the premise that children throughout the elementary grades are capable of learning powerful unifying ideas of mathematics that are the foundation of both arithmetic and algebra. This Institute will focus on how learning and articulating these ideas enhances children's understanding of arithmetic and provides children with a solid basis for extending their knowledge of arithmetic to learn algebra. This Institute is designed for teachers of children in grades 1 - 6 and those who work with such teachers.

## **DEVELOPING MATHEMATICAL IDEAS (DMI) OVERVIEW**

Developing Mathematical Ideas (DMI) is a curriculum designed to help teachers think through the major ideas of K-6 mathematics and examine how children develop those ideas. The curriculum offers teachers opportunities to:

- explore mathematics in lessons led by facilitators;
- share and discuss the work of their own students;
- plan, conduct, and analyze mathematics interviews of their own students;
- view and discuss videotapes of mathematics classrooms and mathematics interviews;
- write their own classroom episodes;
- analyze lessons taken from innovative elementary mathematics curricula, and
- read overviews of related research.

The major goals of the DMI seminars are to help participants:

- learn more mathematics content
- learn to define and select mathematical objectives for their students
- learn to recognize key mathematical ideas with which their students are grappling
- learn how to support children's mathematical thinking
- learn to appreciate the power and complexity of student thinking
- learn how to ask questions that will help students deepen their mathematical understanding
- learn how to analyze a piece of curriculum for the mathematics students will learn from it
- learn to make more mathematical connections for themselves, enhancing their ability to help their students do so
- learn how to continue learning about children and mathematics

Content to be covered includes

- Number and Operations, Part 1: Building a System of Tens
- Number and Operations, Part 2: Making Meaning for
- Examining Features of Shape
- Measuring Space in One, Two and Three Dimensions
- Working with Data

## **LENSES ON LEARNING ADMINISTRATIVE TRAINING OVERVIEW**

For mathematics reform to take hold nationally and have lasting effects within schools and districts, it will not be enough to change what happens inside classrooms. District and administrative support, on a broad scale, also is needed. Lenses on Learning will enable administrators to investigate how their understanding of the nature of mathematics, learning, and teaching affects their interpretation of administrative practices related to mathematics instruction and how, as an administrator they can become more familiar with the ideas that underlie standards based mathematics education, develop new views of what constitutes supportive administrative practices. Most administrators were educated at a time when the ideas about the nature of mathematics, learning, and teaching were very different than those embedded in standard's based mathematics education reform movement. Lenses on Learning consists of three modules designed to support standards based mathematics. Modules include:

- ***Module 1: Instructional Leadership in Mathematics:*** This four-session module provides a broad overview of the fundamental ideas about mathematics, learning, and teaching on which standards based mathematics education is based. Participants will have the opportunity to: do mathematics together; explore how children's mathematical thinking develops by examining student written work and by viewing a clinical interview with a student; think about the nature of standards based instruction and how it differs from a procedural approach to mathematics education. Participants will also consider some of the norms and values that are embedded in standards based mathematics education and how these connect to school and district culture, and to their own leadership roles.
- ***Module 2: Teacher Learning for Mathematics Instruction:*** This five-session module provides administrators with the opportunity to explore the topic of professional development in their schools. Participants will consider what teachers need to learn - about mathematics, making sense of children's understandings, and facilitating discourse to further mathematical thinking - in order to facilitate substantive mathematical learning for children in the classroom. Participants discuss what makes professional development meaningful for teachers and will be introduced to a variety of ways in which teachers might best be supported to re-conceptualize their mathematics teaching.
- ***Module 3: Observing Today's Mathematics Classroom:*** This four-session module will provide participants with the opportunity to develop an "eye" for standards based elementary mathematics classrooms through observation of real mathematics classroom instruction. Teachers' interaction with children to facilitate the development of their mathematical thinking is assessed. Participants will also be exposed to what approaches to post-observation conferences with teachers that are most constructive for this mathematics model.